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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,156	06/25/2004	Takanori Yasukouchi	254534US0PCT	7450

22850 7590 08/31/2007  
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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SHIAO, REI TSANG

ART UNIT	PAPER NUMBER
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1626

NOTIFICATION DATE	DELIVERY MODE
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08/31/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

## Office Action Summary

Application No.

10/500,156

Applicant(s)

YASUKOUCHI ET AL.

Examiner

Robert Shiao, Ph. D.

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 35-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 35-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/12/07.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This application claims benefit of the foreign application:  
JAPAN 2001-395701 with a filing date 12/27/2001.
2. Amendment including cancellation of claims 1-34 and addition of claims 35-52 in the amendment filed on July 02, 2007, is acknowledged. No new matter is found. Claims 35-52 are pending in the application. Since the newly added claim 35-52 are commensurate with the scope of the invention, claims 35-52 are prosecuted in the case.

### *Information Disclosure Statement*

3. The requirement is still deemed proper and therefor made it FINAL. Applicant's Information Disclosure Statement, filed on February 12, 2007 has been considered. Please refer to Applicant's copy of the 1449 submitted herein.

### *Responses to Election/Restriction*

4. The scope of the invention of the elected subject matter is as follows.  
Claims 35-52, in part, drawn to compounds/compositions of formula (3), wherein the variable R<sup>16</sup> represents phenyl thereof; the variable R<sup>17</sup> represents phenyl thereof; the variable R<sup>15</sup> represents a substituted heterocyclic group pyridyl thereof, and the optionally substituent of monocyclic or polycyclic heterocyclic group of R<sup>15</sup> is selected from piperazine, morpholine, piperidine, thiophene, or 1,3-dioxolane thereof, the variable R<sup>16</sup>, R<sup>17</sup> or R<sup>18</sup> independently is not substituted with a heteroaryl, monocyclic or polycyclic heterocyclic group, and their processes of making and methods of use.

The requirement is still deemed proper and is therefor made FINAL.

***Responses to Amendment/Arguments***

5. Since claims 25-27 have been cancelled, the rejection of claims 25-27 under 35 U.S.C. 112, second paragraph has been obviated herein.

6. Since claim 25 has been cancelled, the rejection of claim 25 under 35 U.S.C. 112, first paragraph has been obviated herein.

7. Since claims 26-27 and 30-32 have been cancelled, the rejection of claims 26-27 and 30-32 under 35 U.S.C. 112, first paragraph has been obviated herein. The newly added claims 47-50 are drawn to methods of use treating a disease resulting abnormal production or secreting of beta-amyloid proten, Alzheimer's disease or Down syndrome.

Applicant's arguments regarding the enablement of the newly added claims 47-48 and 50 filed on July 02, 2007 have been fully considered but they are not persuasive. The breadth of the claims is methods of use of the instant compounds effective to "treating a disease resulting abnormal production or secreting of beta-amyloid protein" without limitation (i.e., no named diseases). Furthermore, the instant claims cover "a disease resulting abnormal production or secreting of beta-amyloid protein" that are known to exist and those that may be discovered in the future, for which there is no enablement provided. Moreover, there is no reasonable basis for assuming the instant compounds of formula (3) embraced by the claims will share the same physiological properties. The newly added claims 47-48 and 50 are still rejected under 35 U.S.C. 112, first paragraph. Incorporation of the limitation (i.e., Alzheimer's disease) and

deletion of "Down syndrome" would overcome the rejection.

8. Since claims 18-25, 28 and 34 have been cancelled, the rejection of claims 18-25, 28 and 34 under 35 U.S.C. 102(b) has been obviated herein. Since claims 18-34 have been cancelled, the rejection of claims 18-34 under 35 U.S.C. 103(a) has been obviated herein. Since the variable R<sup>15</sup> of formula (3) of the newly added claims 35-46 represents a substituted heterocyclic group pyridyl, the compounds of newly added claims 35-46 are not anticipated or rendered obviousness over Anders et al., Traynelis et al. or Butlin et al. '909.

9. Since claims 18-34 have been cancelled, the provisional rejection of claims 18-34 under the obviousness-type double patenting has been obviated herein. However, the compounds/compositions of formula (3) of the newly added claims 35-52 still render obviousness over Kubota et al. co-pending application No. 10/561,838. The newly added claims 35-52 are still provisionally rejected under the obviousness-type double patenting over Kubota et al. '838. Applicants are requested to file a terminal disclaimer to overcome the rejection.

### ***Claim Objections***

10. Claims 35-52 are objected to as containing non-elected subject matter, i.e., heterocyclic group or heteroaryl, etc. It is suggested that applicants amend the claims to the scope of the elected subject matter as defined on the pages 2-3 *supra*.

11. Claims 35-52 are objected as to because of the following informalities:

A symbol of "(" or ")" is used for the limitation of variable Q<sup>207</sup>, i.e., see line 7 in the page

4. Replacement of the symbol “(“ or “)” with a symbol “,” would obviate the objection.

**12. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Shiao whose telephone number is (571) 272-0707. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information

Art Unit: 1626

for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

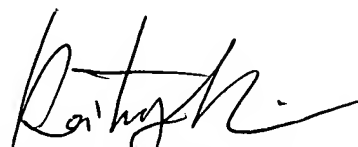
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert Shiao, Ph.D.  
Patent Examiner  
Art Unit 1626

August 28, 2007